

4.2 Paging Service Provider (PSP) Administration Function

The Paging Service Provider (PSP) Administration Function is responsible for controlling the Provision and enabling the Delivery Actions.

Other functions of the Paging Service Provider (PSP) Administrative Function are beyond the scope of this standard.

4.3 Provision Action

The Provision Action is responsible for enabling and disabling activation of a clone radio receiving device(s) as required to receive the reasonably available call-identifying information and call content described in the Lawful Authorization. The Provision Action includes the ability:

- to unobtrusively make the call content and reasonably available call-identifying information available to the delivery action and
- to protect (i.e., prevent unauthorized access, manipulation, and disclosure) intercept controls and intercepted call content and reasonably available call-identifying information consistent with PSP security policies and practices.

For traditional paging, the Provision Action programs the LEA-furnished clone radio receiving device for operation on the radio frequency of operation and with only the capcode(s) of the intercept subject included.

4.4 Law Enforcement Administrative Function

The Law Enforcement Administrative Function is responsible for controlling LEA electronic surveillance functions.

The LEA is also responsible for providing the clone radio receiving device to the PSP for provisioning and for surrendering the clone radio receiving device for deactivation at termination of the lawful authorization.

The Law Enforcement Administrative Function is the responsibility of the LEA.

Other functions of the Law Enforcement Administrative Function are beyond the scope of this standard.

4.5 Messaging Input Function

The Messaging Input Function is the delivery of messages from wireline carrier sources (e.g., EC, ISP) to the PSP Infrastructure and is beyond the scope of this Standard.

4.6 PSP Infrastructure Function

The PSP Infrastructure Function is the switching and radio transmission network of the PSP. For this Standard, the PSP Infrastructure need not be modified to support clone radio receiving devices.

4.7 Delivery Action

The Delivery Action is responsible for delivering intercepted communications to one or more clone radio receiving devices. The Delivery Action delivers reasonably available call-identifying information and call content over the radio transmission channel used by the intercept subject. Processing of the delivered reasonably available call-identifying information and call content derived from the clone radio receiving device is the responsibility of the Law Enforcement Administrative Function.

The Delivery Action includes the ability:

- to deliver call content and reasonably available call-identifying information for each intercept subject over the radio transmission channel(s) to clone radio receiving device(s) and
- to protect (i.e., prevent unauthorized access to, manipulation of, or disclosure of) intercept controls and intercepted call content and reasonably available call-identifying information consistent with PSP security policies and practices.

For traditional paging, the Delivery Action transmits call content and reasonably available call-identifying information to both the intercept subject's radio receiving device and the clone radio receiving device.

4.8 Subject Radio Receiving Device Function

The Subject Radio Receiving Device Function is responsible for collecting and interpreting communications (i.e., call content and reasonably available call-identifying information) for the intercept subject.

4.9 Clone Radio Receiving Device Function

The Clone Radio Receiving Device Function is responsible for collecting lawfully authorized intercepted communications (i.e., call content and reasonably available call-identifying information) for the LEA.

Enabling and disabling of the activation of the clone radio receiving device is the responsibility of the PSP as defined in the Lawful Authorization.

Procurement and monitoring of the clone radio receiving device is the responsibility of the LEA.

At the end of the term of the lawful authorization, the LEA must return the clone radio receiving device to the PSP for deactivation.

5. Call Content and Reasonably Available Call-Identifying Information Delivery

The PSP is required to provide access to the call content and reasonably available call-identifying information for particular intercept subjects.

A subject's call content and reasonably available call-identifying information is transported to the LEA over the same radio transmission channel used by the intercept subject's radio receiving device and will be present on the clone radio receiving device.

Call-identifying information is provided as part of the radio transmission signaling scheme used to transmit the call content and is available through the use of the clone radio receiving device. Because of this, call content and call-identifying information are inherently synchronized and no additional measures are required to perform the synchronization function.

In cases where circumstances dictate that the call content and the reasonably available call-identifying information associated with a particular subject need to be delivered to more than one LEA simultaneously, as may occur when different LEAs are conducting independent investigations on the same subject, the delivered call content and reasonably available call-identifying information shall be made available to other LEAs as required. This is also true for multiple intercept subjects. Separate clone radio receiving devices will be used to deliver the call content and reasonably available call-identifying information to each LEA.

6. Call Content and Reasonably Available Call-Identifying Information Surveillance Service Description

The clone radio receiving device is used to monitor all paging communications to the intercept subject(s) and to display the exact content(s) of these messages concurrent with their receipt by the subject.

Clone radio receiving devices provide the additional flexibility to permit an LEA to intercept the subject's communications anywhere within the intercept subject's pre-defined geographical coverage area.

The clone radio receiving device provides access to the transmissions to the intercept subject unobtrusively. Access to reasonably available call-identifying information and call content does not deny the availability of traditional paging service to either the intercept subject or the calling party.

The PSP shall not be responsible for decrypting, or ensuring the government's ability to decrypt, any communications encrypted by a subscriber or customer, unless the encryption was provided by the PSP and the PSP possesses the information necessary to program the clone radio receiving device to decrypt the communication.

References

Communications Assistance for Law Enforcement Act, Pub. L. No. 103-414

Telecommunications Carrier Assistance to the Government, H. Rep. No. 103-827

Lawfully Authorized Electronic Surveillance, TIA/ATIS, Interim/Trial Use Standard
(J-STD-025)

Glossary

CALEA

Communications Assistance for Law Enforcement Act.

call content

see *content*.

call-identifying information

is defined in CALEA Section 102 (2) to be "dialing or signaling information that identifies the origin, direction, destination, or termination of each communication generated or received by a subscriber by means of any equipment, facility, or service of a [PSP]." As interpreted by this Standard for traditional paging: *destination* is the radio receiving device address to which a call is being made (e.g., called party); *direction* is the outbound transmission path from the PSP to the radio receiving device; *origin* is the number of the party initiating a call (e.g., calling party); and *termination* is the entry to the transmission path from the PSP to the radio receiving device. For traditional paging, reasonably available call-identifying information is limited to the subject's radio receiving device address that is available through monitoring the radio transmission channel. The call origin is not reasonably available in most PSP installations but may be obtained through the originating service provider (e.g., EC, ISP).

calling party

the originating party of a traditional paging message destined for a subscriber.

capcode

the radio address decoder element in each radio receiving device that permits the radio receiving device to be selectively identified and signaled over a common radio channel. Colloquially, this term is used to identify the radio receiving device's radio signaling scheme address.

channel

an independent path for communicating between two points.

clone radio receiving device

a radio receiving device, provided by the LEA, that is pre-programmed by the PSP as authorized by a lawful authorization with the intercept subject's radio receiving address and set to monitor the subject's radio receiving frequency with the express purpose of decoding and capturing the subject's call content when used within the subject's fixed geographical broadcast area. A clone radio receiving device has the same characteristics and call content reception and processing features as the intercept subject's radio receiving device.

Clone Radio Receiving Device Function

is responsible for collecting lawfully authorized intercepted communications (i.e., call content and reasonably available call-identifying information) for the LEA. see *clone radio receiving device*.

Commission

defined in CALEA Section 102 (3) to be "the Federal Communications Commission".

communication

in this Standard, communication refers to any wire or electronic communication, as defined in 18 USC 2510.

communication intercept

see *intercept*.

complete

a traditional paging call is considered complete when it has been transmitted by the PSP's radio transmission network.

connection

a relationship between two or more parties of a call to allow communication between them.

content

is defined in 18 USC 2510 (8) to be "when used with respect to any wire or electronic communications, includes any information concerning the substance, purport, or meaning of that communication." As interpreted by this Standard for traditional paging, call content covers tone-only, numeric, alphanumeric, and voice messages provided over the radio transmission channel to the intercept subject's radio receiving device.

Delivery Action

is responsible for delivering intercepted communications to one or more clone radio receiving devices. The Delivery Action delivers reasonably available call-identifying information and call content over the radio transmission channel used by the intercept subject. For traditional paging, the Delivery Action transmits call content and reasonably available call-identifying information to the intercept subject's radio receiving device and the clone radio receiving device.

destination

see *call-identifying information*

direction

see *call-identifying information*

EC

see *Exchange Carrier*.

electronic surveillance

the statutory-based legal authorization, process, and associated technical capabilities and activities of LEAs related to the interception of wire, oral, or electronic communications while in transmission. As used in this Standard for traditional paging, *surveillance* includes the radio channel call-identifying information and call content available through the use of a clone radio receiving device for lawfully authorized communication intercept. It does not include any other form of surveillance.

Exchange Carrier

the wireline PSTN carrier interface provider. Exchange carriers may take the form of a local exchange carrier or an interexchange carrier.

functional entity

a system or subsystem capable of providing a defined service.

government

defined in CALEA Section 102 (5) to be "the government of the United States and any agency or instrumentality thereof, the District of Columbia, any commonwealth, territory, or possession of the United States, and any State or political subdivision thereof authorized by law to conduct electronic surveillance."

Information Service

defined in CALEA Section 102 (6) to be "(A) the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunication; and (B) includes -- (i) a service that permits a customer to retrieve stored information from, or file information for storage in, information storage facilities; (ii) electronic publishing; and (iii) electronic messaging services; but (C) does not include any capability for a [PSP's] internal management, control, or operation of its telecommunication network."

Intercept

defined in 18 USC 2510 (4) to be "the aural or other acquisition of the content of any wire, electronic, or oral communication through the use of any electronic, mechanical, or other device." In this Standard, traditional paging intercepts will be accomplished through the use of clone radio receiving devices.

Intercept subject

a paging service subscriber whose reasonably available call-identifying information and call content have been authorized by a court to be intercepted and delivered to an LEA. In this Standard, a traditional paging intercept subject's delivered information will be that available through the use of a clone radio receiving device.

Internet Service Provider

the wireline Internet carrier interface provider.

ISP

see *Internet Service Provider*.

LAES

Lawfully Authorized Electronic Surveillance

Law Enforcement Administrative Function

is responsible for controlling LEA electronic surveillance functions for traditional paging, and for providing the clone radio receiving device to the PSP for provisioning and for surrendering the clone radio receiving device for deactivation at termination of the lawful authorization. The Law Enforcement Administrative Function is the responsibility of the LEA. Other functions of the Law Enforcement Administrative Function are beyond the scope of this standard.

Law Enforcement Agency

a government entity with the legal authority to conduct electronic surveillance.

Lawful Authorization

no intercepts shall take place without specific lawful authorization. One Lawful Authorization may encompass multiple devices and/or multiple geographic locations.

Lawful Authorization Action

the serving of the Lawful Authorization to the PSP by the LEA.

LEA

see *Law Enforcement Agency*.

Messaging Input Function

is the delivery of messages from wireline carrier sources (e.g., EC, ISP) to the PSP Infrastructure.

Origin

see *call-identifying information*.

paging service provider⁷

defined from CALEA Section 102 (8) to be, "a person or entity engaged in the transmission or switching of wire or electronic communications as a common carrier for hire, and includes 1) a person or entity engaged in providing commercial mobile service, or 2) a person or entity engaged in providing wire or electronic communications switching or transmission service to the extent that the Commission finds such service is a replacement for a substantial portion of local telephone exchange service and that it is in the public interest to deem such a person or entity to be a [PSP] for purposes of this title. This does not include 1) persons or entities insofar as they are engaged in providing information services, and 2) any class or category of [PSPs] that the Commission exempts by rule after consultation with the U. S. Attorney General."

Paging Service Provider Administration Function

is responsible for controlling the Provision and enabling the Delivery Actions. Other functions of the Paging Service Provider (PSP) Administrative Function are beyond the scope of this standard.

Provision Action

is responsible for enabling and disabling activation of a clone radio receiving device(s) as required to receive the reasonably available call-identifying information and call content described in the Lawful Authorization. For traditional paging, the Provision Action furnishes the clone radio receiving device programmed for the radio frequency of operation with only the cap-code(s) of the intercept subject included.

PSDN

Public Switched Data Network.

PSP

see *Paging service provider*.

PSP Administration Function

see *Paging Service Provider Administration Function*.

PSP infrastructure

embodies the central control switch(es), base station transmitter(s), and wire-line interconnect(s) that tie the radio network to the PSTN, PSDN, the World Wide Web, and other land-based facilities to allow paging calls to be initiated and transmitted to the intended subscriber.

PSP Infrastructure Function

see *PSP Infrastructure*.

PSTN

Public Switched Telephone Network.

RF

Radio Frequency

⁷ This Standard uses the term *paging service provider* instead of the CALEA term *telecommunication carrier*.

signaling scheme

the radio signaling protocol used to deliver messages to specific radio receiving devices. Radio signals radiated by base station transmitters are encoded with radio receiving device capcode and message content information. These signaling schemes may utilize analog (e.g., 2-tone, 5/6-tone) or digital (e.g., POCSAG, Golay Sequential Code®, FLEX™, ERMES) modulating techniques with the transmitted information organized in accordance with any of several formats which specify such parameters as transmission rate, structure of the information, and error control mechanisms.

Subject Radio Receiving Device Function

is responsible for collecting and interpreting communications (i.e., call content and reasonably available call-identifying information) for the intercept subject.

subscriber

entity subscribing to the services provided by the paging service provider.

traditional paging

traditional paging supports the one-way wireless transmission of tone-only, numeric, alphanumeric, and voice messages from a PSP to one or more radio receiving devices within a stipulated, predefined geographic radio coverage area of the PSP's infrastructure.

termination

see *Call-Identifying Information*.

transmission

the act of transferring communications from one location or another by wire, radio, electromagnetic, photoelectronic, or photo-optical system.

transparent

end-to-end transmission without insertion or loss of information.

unobtrusive

not undesirably noticeable or blatant; inconspicuous; within normal call variances.

USC

United States Code.

wire communications

defined in 18, USC 2510 (1) to be "any aural transfer made in whole or in part through the use of facilities for the transmission of communications by the aid of wire, cable, or other like connection between the point of origin and the point of reception (including the use of such connection in a switching station) furnished or operated by any person engaged in providing or operating such facilities for the transmission of interstate or foreign communications or communications affecting interstate or foreign commerce and such term includes any electronic storage of such communication."

wireless

in this Standard refers to traditional paging service.

wireline

in this Standard refers to traditional wire-based telephone and packet data services.